226 obtained from unaugmented Kern, near present town of Kernville.

Fishing techniques and use of certain localities for fishing varied according to height of streams and temperature of water; location of few fish camps noted (p. 40). In spring before water too warm, fishing carried on at sites on augmented Kern. At rapids near w. end of gorge "there were lots of fish; the Tolowim (Bankalachi) used to camp there to fish, also the Tejon Indians (Yokuts) and Pahkanapil too. Sometimes the Monilabal and Palabatal (Yokuts groups) came up there to fish" (SM). Groups of Tübatulabal also camped at rock paintings farther upstream; fish harpooned from rocks mainly at these locations as water swift-running, with many pools.

[411] [227] Pronged harpoon California type (Kroeber, Handbook, 86) consisting of pole (mi·šṭ) 7-8 ft. long, with pair 6-in. foreshafts; toggleheads (wili·li·nist) 1 1/2 in. long, carved from deer bone; heads sharply pointed, barbed. Later in summer fishing activities shifted higher up river to sites on unaugmented Kern and to mt. lakes and streams. Round nets made of native twine, with 3-4 in. meshes and lacking handle, were used, being held up on each side by 2 men standing in water (FP); SM denied use of nets. Large nets, similarly made, stretched across stream, held up by 4 men (PN, FP). Net sinkers not used (FP, PN). Tule basket trap (wa·mat), similar to Pomo trap (Kroeber, Handbook, 172, pl. 33a), used in smooth

[321] water. Fish taken in nets speared (PN). Fishhooks (wele·hanišṭ) were said to have been 2-piece, with single bone barb made from shank bone of deer. Barb filed to point on rock, blunt end attached at 45° angle to base of shank with wrap-

[283] ping of native twine which was given coating of asphalt to make it fast. Line made from native twine, smeared with asphalt; attached to end of long willow pole (wipšat). Earthworms, grasshoppers used for bait (tï·hat). Fishhooks and pole "not used very much" (SM); post-white (?). No double hooks, gorgets used.

226 476 ●417 Bulk of communal fishing in streams, rivers done to obtain fish for drying. Informants dwelt upon one method of communal fishing, although it is no longer practiced. Fish corral (pa·nil) built in shallow, fast-running water (fig. 2), "when there were lots of fish running." Wall of corral 2 1/2-3 ft. high; built up of large stones filled in with willow branches; diameter of round enclosure 7 ft., width of opening to corral 3 ft. Men went about 2 mi. downstream from corral, threw stones in water to drive fish upstream. Two men, stationed on either side of gateway to

[462] corral, beat water with long willow poles so that all the fish would swim into corral. Inside corral 2, 3 men bailed out fish, throwing them up on bank to women who collected them in large pile. Each participant in undertaking shared equally in distribution of fish, which was effected in same manner rabbits apportioned after drive (p. 13).

226 Another method of obtaining fish in large

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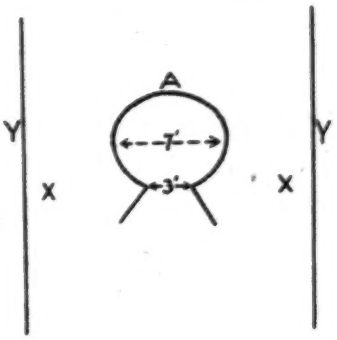

Fig. 2. Fish corral. A, wall of corral, X, men with poles, Y, banks of stream.

Another method of obtaining fish in large
226 quantities was to stupefy them; roots, stalks, leaves of plant (pa·lu·l) which "looks like cane, grows in moist soil, has leaves that get reddish-yellow in fall" and which SM identified from
[171] drawing as sp. of Smilacina, mashed slightly, thrown into quiet pools. Buckeye, turkey mullein, soaproot, all available to Tübatulabal and used by other tribes as fish poison, not used (SM, FP). In poisoning fish, no dam built; as fish floated to surface they were scooped up in conical twined tule baskets.

226 In winter fish sluggish, "hardly move"; mainly
411 harpooned or speared from rafts in Kern r. and South Fork valley lakes by individuals. Fish spear long pole with 2 wooden points sharpened by rubbing on rock.

252 Fresh fish cleaned, roasted whole; 4 large fish often tied together, wrapped in branches of odorless willows (poyiwošt; p. 11) and cooked in ashes at fishing place; carried home in willow wrapping. Mussels cooked by roasting in shells in hot ashes.
[251] Fish one of foods Tübatulabal stored for winter use.

824 Ethnobotany.- Botanical collections made chiefly
137 in South Fork, Kern valleys, and surrounding foothill regions in May-July; collections checked with SM, ES chiefly. Some 220 species collected, 130 of which informants said were put to economic or medicinal uses; 56 of these ethnobotanical species belong to foothill floral area, 40 to desert floral area, 10 to Great Basin floral area; remainder general in distribution.

In identifying specimens, informants tasted, smelled plants if dubious about identification.

Of plant foods, those starred mentioned most frequently by informants; possibly these plants used most commonly for food in aboriginal times.

Nuts, large seeds (generic term, punɣil) included: *Acorns (generic term, wa'ant). Six varieties used: (1) acorns (maŋi·l) from blue oak (maŋi·'u·l), Quercus douglasii H. & A., foothill floral area; these grow on n. slopes of Paiute mts. at s. borders Tübatulabal area; nuts mature annually, large, "don't taste bitter after leach-